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ruck/Van Directory

automotive FLEET

CAR AND LIGHT TRUCK FLEET AND

'90 Trucks & Specs

Upfitting Showcase

Statistics

Top 100 Truck Fleets
Specing Light Trucks

automotive
FLEET®

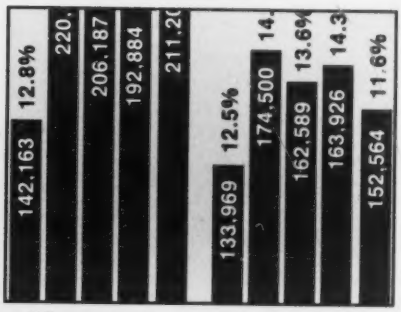
CAR AND LIGHT TRUCK FLEET AND LEASING MANAGEMENT MAGAZINE

BOBIT PUBLISHING

DECEMBER 1989
VOL. 29,NO. 2

Influencing the management of 4,952,000 cars and 2,070,000 light trucks and vans in business, leasing, rental, utility, government, police and taxi fleets.

Features



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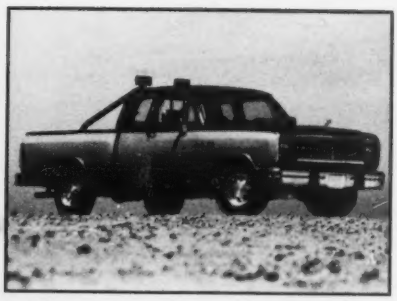

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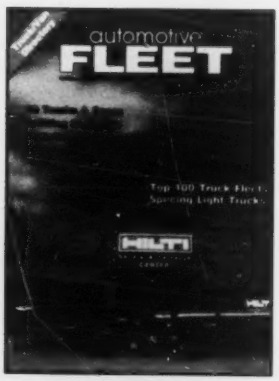

On the cover: Pictured are two Hilti Western Hemisphere vans equipped with AutoPage remote and paging vehicle security systems. Our cover story begins on page 40.

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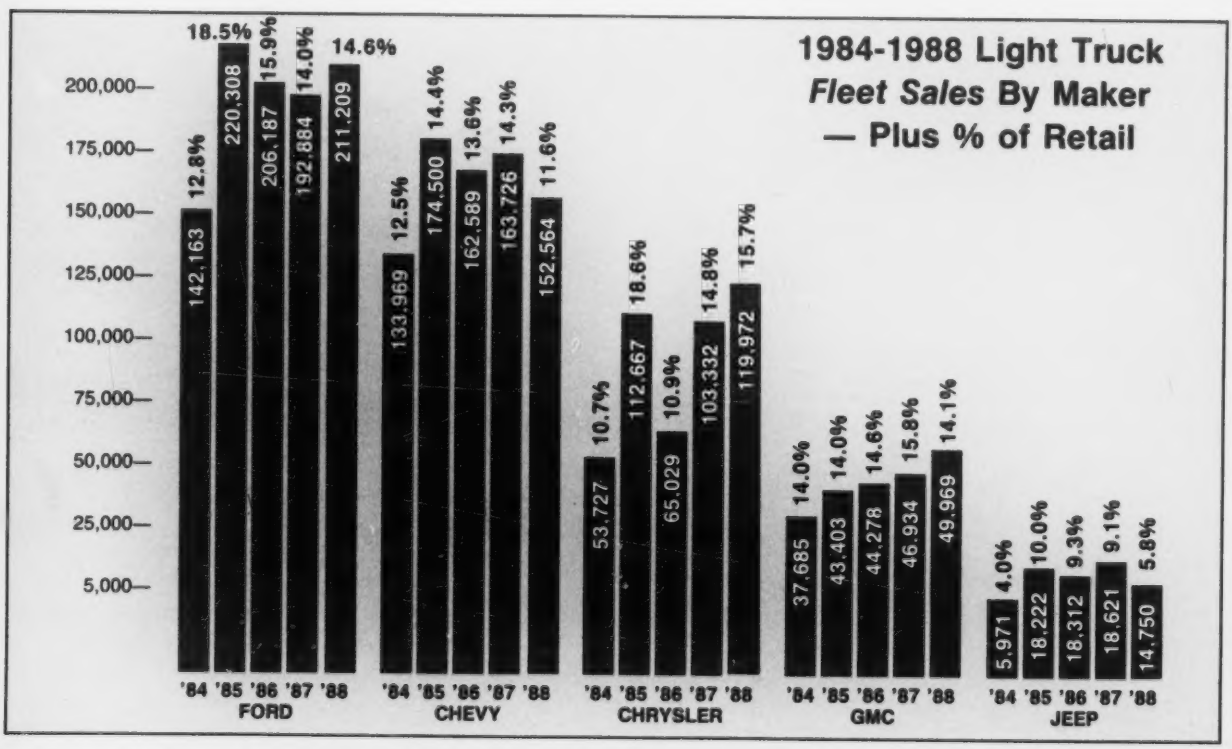
AUTOMOTIVE FLEET® (ISSN 0005-1519) is published monthly expect April, by Bobit Publishing Company, 2512 Artesia Boulevard, Redondo Beach, California 90278. The contents of this publication may not be reproduced either in whole or in part without consent of Bobit Publishing. Please address ALL correspondence to the Editorial and Executive Offices at 2512 Artesia Boulevard, Redondo Beach, California 90278. Subscription Prices — United States: $24 per year, $40 for two years; Canadian $32 per year, $60 for two years. Single copy price — $2.00; Fact Book — $35. Number of cars operated and services must accompany the order. Second Class postage paid at Redondo Beach, California 90277-9998 and at additional mailing offices. POSTMASTER: Send address changes to Automotive Fleet, 2512 Artesia Boulevard, Redondo Beach, California 90278. Bobit Publishing also publishes *Bedroom, Business Driver, Installation News, Fleet Financials, Limousine & Chauffeur, Metro, Contemporary Surgery, Contemporary Orthopaedics, School Bus Fleet, Security Sales, Canadian Automotive Fleet, Canadian Business Driver, Cadillac Guide to Customizing, Nails, Showcase USA, and StoryboarD.*

U.S. Light Truck Statistics

New 1981 to 1989 Light Truck Registrations Reported
Class 1, 2 & 3 National and Fleet Totals
Calendar Year

Source: Automotive Fleet Research Dept.

MAKE	1981	1982	1983	1984	1985	1986	1987	1988	6 mos. 1989
Total	1,926,887	2,237,843	2,799,636	3,793,798	4,391,588	4,659,261	4,422,192	4,882,482	2,382,538
Fleet	294,475	317,017	294,633	455,742	670,801	630,107	589,507	613,469	333,661
% Fleet	*15.3*	*14.2*	*10.5*	*8.3*	*15.3*	*13.5*	*13.3*	*12.6*	*14.0*
CHEVY	619,997	726,358	891,125	1,072,231	1,209,012	1,198,856	1,145,472	1,314,657	645,405
	94,289	97,514	90,688	133,969	174,500	162,589	163,726	152,564	83,801
	15.2	*13.4*	*10.2*	*12.5*	*14.4*	*13.6*	*14.3*	*11.6*	*13.0*
FORD	648,804	689,941	905,846	1,111,832	1,189,053	1,296,181	1,376,037	1,443,060	710,062
	116,979	101,471	106,263	142,163	220,308	206,187	192,884	211,209	113,440
	18.0	*14.7*	*11.7*	*12.8*	*18.5*	*15.9*	*14.0*	*14.6*	*16.0*
GMC	128,615	186,257	224,718	268,858	309,125	304,133	296,435	354,282	171,829
	21,531	23,772	23,244	37,685	43,403	44,278	46,934	49,969	25,619
	16.7	*12.8*	*10.3*	*14.0*	*14.0*	*14.6*	*15.8*	*14.1*	*14.9*
DODGE & PLYMOUTH	181,308	228,232	263,687	503,967	606,388	596,159	697,773	763,309	391,886
	29,930	29,078	28,491	53,727	112,677	65,029	103,332	119,972	73,449
	16.5	*12.7*	*10.8*	*10.7*	*18.6*	*10.9*	*14.8*	*15.7*	*18.8*
JEEP	58,257	62,097	76,453	148,040	181,939	195,973	203,625	253,454	126,268
	3,246	3,816	1,947	5,971	18,222	18,312	18,621	14,750	8,231
	5.6	*6.1*	*2.5*	*4.0*	*10.0*	*9.3*	*9.1*	*5.8*	*6.5*
OTHER Inc. Imports, etc.	317,250	344,958	437,797	687,074	784,013	1,008,693	702,850	753,720	337,088

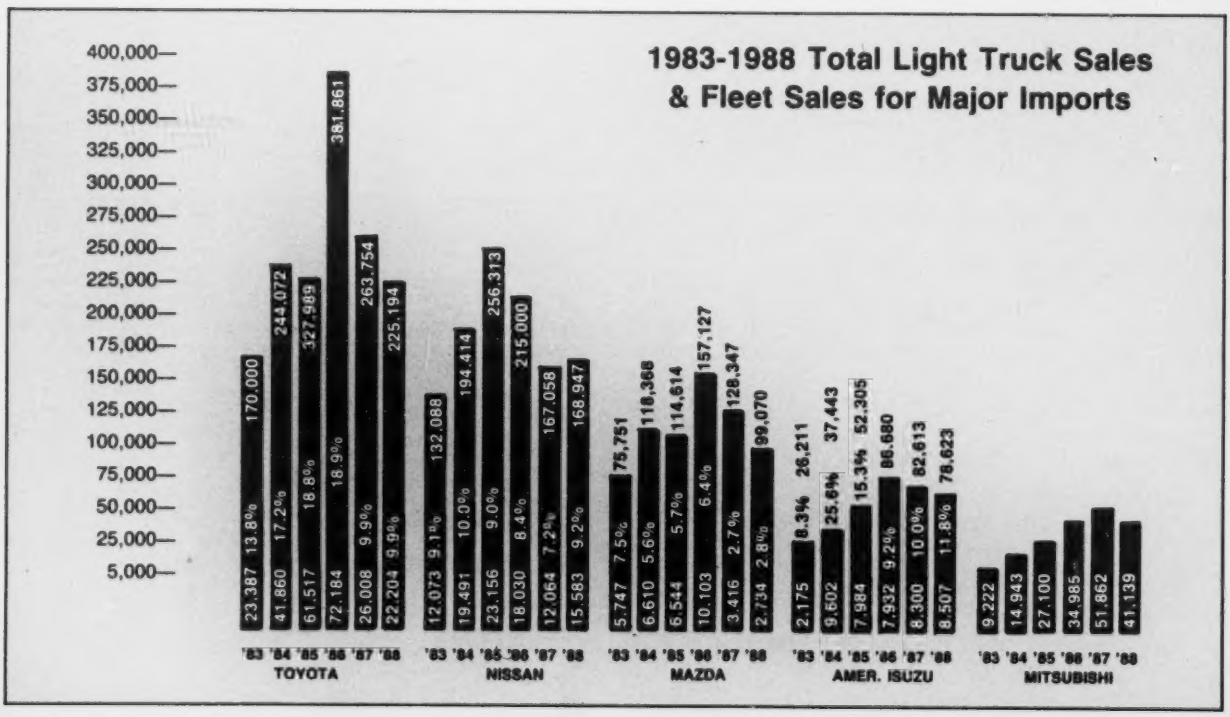


Import Light Truck Market Statistics

New 1981 to 1989 Light Truck Sales/Registrations Reported
Class 1, 2, & 3, National and Fleet Totals
Calendar Year

Source: Automotive Fleet Research Dept.

MAKE	1981	1982	1983	1984	1985	1986	1987	1988	6 mos. 1989
TOYOTA									
Total	130,379	143,439	170,000	244,072	327,989	381,861	263,754	225,194	100,548
Fleet	9,413	10,936	23,387	41,860	61,517	72,184	26,008	22,204	12,382
% Fleet	*7.2*	*7.6*	*13.8*	*17.2*	*18.8*	*18.9*	*9.9*	*9.9*	*12.3*
NISSAN	119,684	106,440	132,088	194,414	256,313	215,000	167,058	168,947	74,438
	6,184	13,430	12,073	19,491	23,156	18,030	12,064	15,583	6,808
	5.5	*12.6*	*9.1*	*10.0*	*9.0*	*8.4*	*7.2*	*9.2*	*9.1*
MAZDA	16,798	40,661	75,751	118,368	114,614	157,127	128,347	99,070	41,997
		2,192	5,747	6,610	6,544	10,103	3,416	2,734	4,078
		5.3	*7.5*	*5.6*	*5.7*	*6.4*	*2.7*	*2.8*	*9.7*
AMERICAN ISUZU	9,959	17,669	26,211	37,443	52,305	86,680	82,613	78,623	41,442
			2,175	9,602	7,984	7,932	8,300	8,507	4,070
			8.3	*25.6*	*15.3*	*9.2*	*10.0*	*11.8*	*9.8*
MITSUBISHI		931	9,222	14,943	27,100	34,985	51,862	41,139	15,203
								807	210
								2.0	1.4
IVECO		1,669	1,679	2,106	1,948	1,411	1,268	1,556	641
ISUZU TRUCK (Class 3)					2,526	4,661	4,825	4,736	2,835
MITSUBISHI FUSO							976	1,624	944
UD TRUCKS — NISSAN DIESEL AMERICA								69	240
TOTAL								452,011	278,228
								50,634	28,008
								11.2	10.1



Light Truck/Van Sales Statistics

RETAIL SALES OF NEW TRUCKS BY FRANCHISED DEALERS[1]

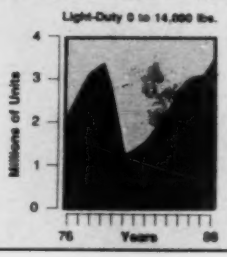
Gross Vehicle Weight	1983	1984	1985	1986	1987	1988
0-6000 lbs.						
Utility						
Domestic	253,823	369,883	428,656	382,231	382,966	434,642
Import[1]	—	—	—	4,768	19,539	10,006
Car-Type Pickup	26,170	25,699	24,420	24,050	15,448	480
Compact Pickup						
Domestic	433,167	560,378	625,358	678,585	795,110	848,006
Import[1]	55,143	52,894	70,317	78,706	65,593	53,283
Van	67,299	121,374	114,919	112,429	88,924	47,125
Minivan	18	23,727	103,237	110,072	101,321	105,369
Conventional Pickup						
(Incl. extended & crew cabs)	445,370	632,401	644,367	582,140	565,758	592,665
Station Wagon (Truck Chassis)	8,394	61,623	85,591	97,655	108,453	138,410
Mini Passenger Carrier	8,174	168,774	300,963	459,721	546,106	691,623
Passenger Carrier	16,364	14,250	10,623	10,771	6,909	4,419
Total	**1,313,922**	**2,031,003**	**2,408,451**	**2,541,128**	**2,696,127**	**2,926,028**
6,001-10,000 lbs.						
Utility	84,493	103,258	107,790	100,880	91,243	90,103
Van	311,207	264,997	261,050	261,194	253,823	301,979
Van Cutaway Chassis	45,228	54,954	56,122	51,085	55,954	61,796
Conventional Pickup						
(Incl. extended & crew cabs)	573,918	572,595	628,265	582,293	569,278	665,776
Station Wagon (Truck Chassis)	68,844	86,056	94,603	98,461	91,125	104,123
Passenger Carrier	76,985	84,838	86,765	76,052	66,252	64,519
Multi-Stop	45,924	57,540	45,620	43,699	47,405	44,805
Total	**1,206,599**	**1,224,238**	**1,280,215**	**1,213,664**	**1,175,080**	**1,333,101**
10,001-14,000 lbs.	**145**	**6,019**	**10,854**	**11,558**	**14,007**	**14,228**

[1] Sales, including domestic-sponsored imports, by U.S. manufacturers for the years 1983-1985. Data for 1986-1988 include sales of trucks over 10,000 lbs. by overseas manufacturers.

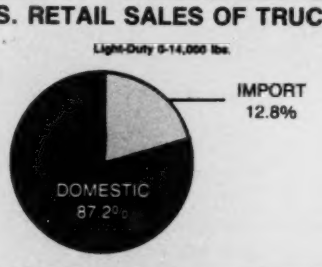
U.S. TRUCK AND BUS FACTORY SALES BY BODY TYPE

	1982	1983	1984	1985	1986	1987	1988
Under 10,000 lbs. GVW[1]							
Pickup	1,141,050	1,278,099	1,494,770	1,461,914	1,579,563	1,800,022	1,896,631
Compact or Passenger Car Type	445,082	500,827	511,558	575,253	650,368	753,451	817,746
Conventional	695,968	777,272	983,212	886,661	929,195	1,046,571	1,078,885
Multi-Stop	32,036	47,465	62,984	44,898	46,149	49,053	51,987
Minivan	N.A.	N.A.	N.A.	N.A.	101,466	99,660	111,530
Van	192,681	284,607	343,841	401,089	305,749	319,438	315,938
Station Wagon (on Truck Chassis)	88,418	117,931	214,289	240,806	240,141	271,231	323,748
Mini Passenger Carrier	N.A.	N.A.	N.A.	N.A.	276,795	400,464	510,776
Passenger Carrier	47,066	44,135	54,991	153,741	40,842	39,717	40,663
General Utility	153,230	396,718	507,431	550,977	439,786	458,333	453,024
Other	67,066	50,938	90,969	192,565	97,655	90,442	105,663
Total Under 10,000 lbs. GVW	**2,862,597**	**3,497,992**	**4,264,045**	**4,507,904**	**4,707,709**	**5,328,382**	**5,706,591**

ANNUAL TRUCK FACTORY SALES BY GROSS VEHICLE WEIGHT

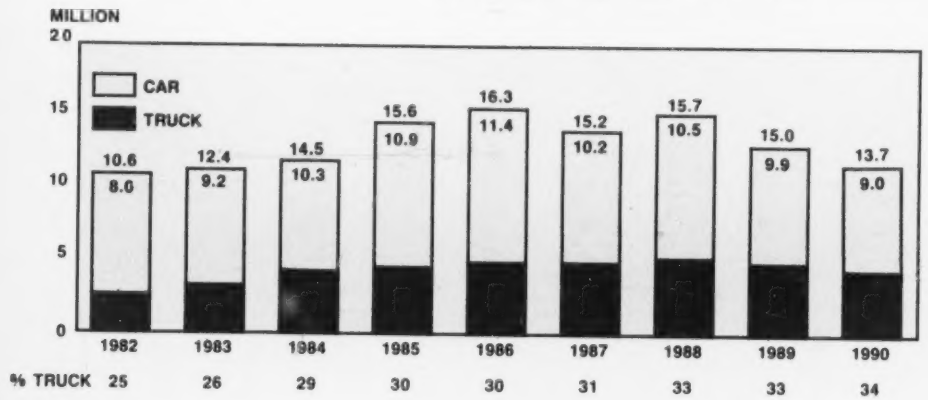


U.S. RETAIL SALES OF TRUCKS



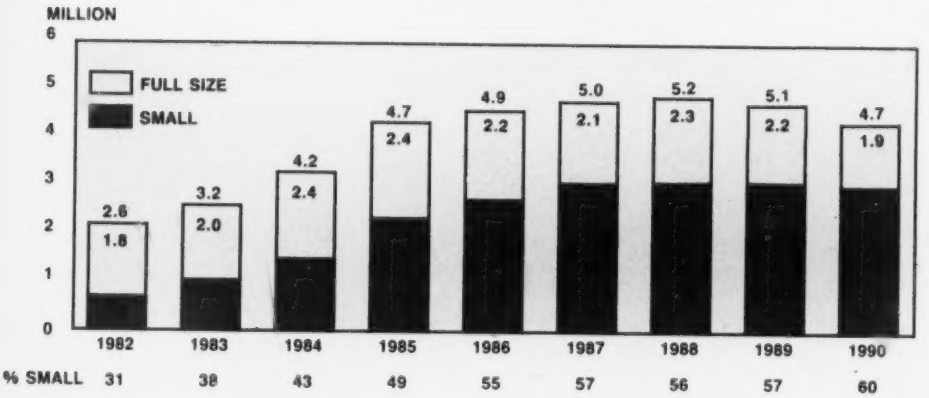
U.S. Light Truck Statistics

Total Industry Sales
1982-1989 CY & Projected



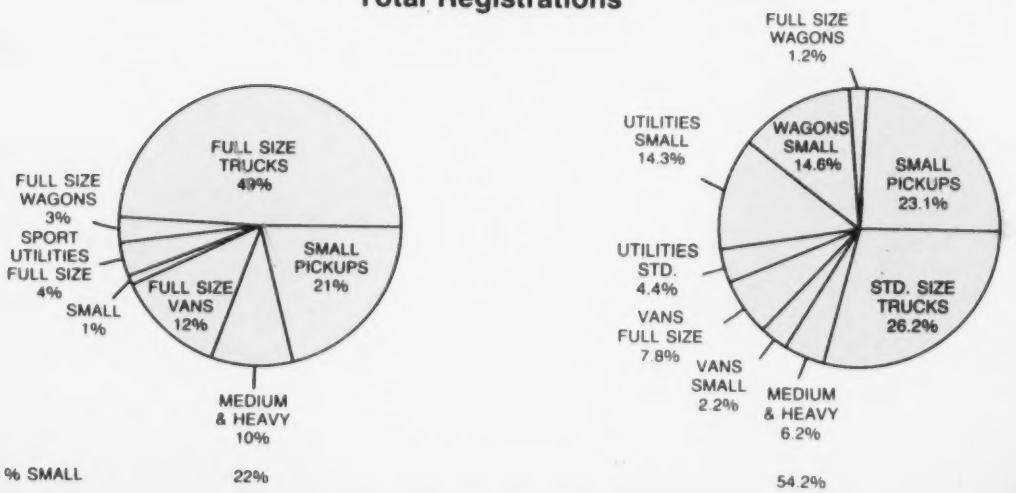
Trucks have been on the increase since 1981—going from 2.3 million and only 21 percent of the industry to the all-time record of 5.2 million and 33 percent of the industry in 1988, with decreases in 1989 and expected in 1990.

Total Industry Sales
1982-1989 CY & Projected



In 1981, only 500,000 small trucks were sold for 22 percent of the market. In contrast, 1989 saw 2.9 million small trucks sold for 57 percent of the market. These 2.9 million small trucks were more than the entire truck market in both 1982 and 1983. In 1990 look for small wagon sales to increase with the new entries of small "wagons."

1981 CY Truck Market 1989 CY
Total Registrations



PLUS
SPECIAL REPORT
Specing Light Trucks

91

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Chrysler Fleet Operations

Presents the First Annual

automotive
FLEET
TOP
100
LIGHT TRUCK FLEETS

Chesapeake & Potomac Siemens Corp. Texaco Inc. (Eastern) Mary Kay Cosmetics Suburban Propane R. J. Reynolds American Home Products ConRail
General Electric—Ind. Pow. Sara Lee Corp. Rockwell International Corp. Wyeth-Ayerst Corp. U.S.G. Corp. James River Corp. of Virginia Gannett Supply
Corp. Flowers Industries, Inc. Fleming Companies Union Electric Co. Petrolane Inc. Combustion Engineering Inc. Automatic Data Processing E. R.
Squibb & Sons, Inc. Philips Medical Systems General Electric Med. Sys. Texaco Inc. (Central) North American Philips Corp. ICI Americas Inc. Ogden
Allied Service Corp. Warner Lambert Co. Safety Kleen Corp. Pillsbury Co. American Building Maint. Co. Textron, Inc. Terminex, Int'l. Consolidated
Freightways Nationwide Mutual Ins. Co. Schering-Plough Allstate Insurance Co. Eaton Corp. Airborne Freight Corp. Sandoz, Inc. Johnson & Johnson
Firestone, Inc. Roche Biomedical Laboratories Inc. Bell & Howell Wausau Alco Standard CIBA-Geigy Corp. Campbell Sales Co. Kemper Insurance Companies
Alexander & Alexander Miles Laboratories, Inc. Bell & Howell Wausau Alco Standard CIBA-Geigy Corp. Campbell Sales Co. Kemper Insurance Companies
United Cable Television Moore Business Forms, Inc. C.P.—Interpace Corp. Gillette Co. Metpath Inc. Sallo/Vintage Wine Co. Gen. Corp. — General Tire Co. Texaco Inc. Colgate Palmolive Co. Gerber Products
Brace American Int'l Realty Co. Tektronic, Inc. St. Paul Fire & Marine Ins. K-Mart Co. The Quaker Oats Co. Emmerson Electric Co. Weyerhauser
Co. Nestle Foods Corp. Lederle Lab. International Rehabilitation Chemlawn Corp. Babcock-Wilcox Siemens Inform. Sys. Inc. Land O' Lakes, Inc. Ohio
Casualty Ins. Co. Thomas J. Lipton, Inc. Nalco Chemical Co. Anheuser-Busch Co., Inc. Syntex Labs TRW Customer Service CNA Insurance Oxy USA,

The 1st Annual Top 100
Commercial / Utility / Rental Light Truck & Van Fleets
(Incl. Classes I, II & III)

'89 Rank	Company & Headquarters	Fleet Contact(s)	Co. Owned	Lessor(s)	#Trucks & Vans
1	United Parcel, Inc. Greenwich, CT	Don Parkinson	X	—	60,000
2	U-Haul Phoenix, AZ	Harry DeShong	X	—	40,000
3	Penske Truck Rental Reading, PA	Vincent W. Harnett	X	—	24,000
4	GTE Service Corp. Stamford, CT	Charles J. Britain	X	—	23,000
5	Federal Express Corp. Memphis, TN	Evelyn Holmes	X	Fleetmark, ARI	21,180
6	Quality Bakers America Greenwich, CT	David I. Armstrong	X	—	17,000
7	Sears, Roebuck and Co. Chicago, IL	William Jones III	X	—	13,800
8	Frito Lay, Inc. Dallas, TX	Tom Smith Arian Guess	X	—	11,000
9	Continental Baking Co. St. Louis, MO	Paul Walsh	X	—	8,762
10	Tupperware Orlando, FL	John Bandy	X	GEC Fleet, Wheels	8,000

'89 Rank	Company & Headquarters	Fleet Contact(s)	Co. Owned	Lessor(s)	#Trucks & Vans
11	Chesapeake & Potomac Silverspring, MD	James Boles	X	—	6,142
12	Emery & Purolator Wilton, CT	J.B. Townley Ron Yavorka	—	Lend Lease	6,000
13	ARA Services Philadelphia, PA	Ralph Jamic Kamran Partow	X	GEC Fleet	5,604
14	Interstate Brands Corp. Kansas City, MO	David Weisman Gary Pasche	X	—	5,229
15	Goodyear Tire & Rubber Akron, OH	George Platis	X	PH&H	5,059
16	Campbell Taggart, Inc. Dallas, TX	Ray Grzywinski	X	—	4,500
17	Xerox Corp. Rochester, NY	Ron Pink	—	LMV	4,461
18	American Elec. Power Service Corp. Columbus, OH	Kevin Dinan	—	Pitney Bowes	4,180
19	Rollins Inc. Atlanta, GA	John Willis	—	B&M World Omni	4,102
20	Phillip Morris USA New York, NY	Gregory Tarring	—	PH&H GEC Fleet	4,100
21	Union Pacific Railroad Omaha, NE	T.R. Oliveri	X	GEC Fleet	4,074
22	CSX Transportation Jacksonville, FL	Jim Fronkoski Mark Gast	X	Bank- Amerilease	4,000
23	Shell Oil Company Houston, TX	Lydia Foght Karen Pohja	X	—	4,000
24	General Electric Louisville, KY	Vic Miska	X	GEC Fleet	3,700
25	Texaco Inc, White Plains, NY	Alexander Hamilton	X	PH&H	3,680
26	Borden Dairy Group Columbus, OH	Max Dawson	X	—	3,673
27	Consolidated Edison New York, NY	Tom Flood	X	—	3,600

'89 Rank	Company & Headquarters	Fleet Contact(s)	Co. Owned	Lessor(s)	#Trucks & Vans
28	VPSI Detroit, MI	Kenneth C. Sieloff	X	—	3,500
29	Service America Corp. Stamford, CT	Wilbur O. Wachter	X	Wheels PH&H	3,439
30	Ashland Oil Inc. Ashland, KY	William D. Bloss	X	PH&H GEC Fleet	3,400
31	Westinghouse Elec. Corp. Pittsburgh, PA	Lou Dobak	X	PH&H LMV	3,350
32	Georgia Power Co. Atlanta, GA	Mark Johnson	X	—	3,100
33	ConRail Philadelphia, PA	Paul Rossi	X	—	3,100
34	Exxon Company U.S.A. Houston, TX	John W. Dewees	X	—	3,000
35	Tenneco, Inc. Houston, TX	J.R. "Jack" Guedlman	X	Fleet Services	3,000
36	Amoco Corp. Chicago, IL	Richard Lynch	X	—	3,000
37	Siemens Corp. Iselin, NJ	John Connelly	X	—	3,000
38	Duke Power Co. Charlotte, NC	Ray Hall	X	—	2,897
39	Phillips Petroleum Bartiesville, OK	James R. Grillot	X	—	2,886
40	Canteen Corp. Chicago, IL	Mark Klein	X	—	2,860
41	Honeywell, Inc. Minneapolis, MN	C. Wayne Jacobson	—	GEC Fleet PH&H	2,780
42	Burlington Northern RR St. Paul, MN	John Long	X	—	2,600
43	ADT Security Systems Parsippany, NJ	John Africano	X	GEC Fleet	2,547
44	Consumers Power Co. Jackson, MI	Mark Brennan	X	—	2,500

'89 Rank	Company & Headquarters	Fleet Contact(s)	Co. Owned	Lessor(s)	#Trucks & Vans
45	Norfolk Southern Roanoke, VA	W.L. Goodman	X	—	2,500
46	Atchison Topeka Santa Fe RR Chicago, IL	Mike Guntar	X	—	2,311
47	R.J. Reynolds Tobacco Co. Winston-Salem, NC	Vicky Brady	X	—	2,308
48	Johnson Controls Milwaukee. WI	Bob Borchert	X	GEC Fleet Wheels	2,308
49	Safety Kleen Corp. Elgin, IL	Richard Knippschild	X	—	2,300
50	Entenmann Bakery, Inc. Bay Shore, NY	Gene Bianco	X	—	2,288
51	Houston Lighting & Power Co. Houston, TX	Mike Astrada	X	—	2,272
52	American Bakeries Charlotte, NC	Jerry Green	X	—	2,272
53	Dow Chemical USA Midland, MI	Tom Madden Sue Sober	—	McCullagh Wheels	2,268
54	Marathon Oil Company Houston, TX	Lois A. Smith	X	PH&H, Wheels	2,150
55	Borg Warner Chicago, IL	Phyllis Howard	—	In-house	2,100
56	Texaco Inc. (Central) Houston, TX	Bernard Byre	—	PH&H	2,100
57	USX Corporation Pittsburgh, PA	Don Hillwig	X	PH&H	2,046
58	Cox Enterprises, Inc. Atlanta, GA	Patsy Brownson	X	ARI, Wheels	2,000
59	Columbia Gas Distribution Columbus, OH	Tim Webber	—	PH&H	1,993
60	Brown & Williamson Tobacco Corp. Louisville, KY	Mike Cooley	X	—	1,980
61	Montgomery Ward Chicago, IL	Roseann Neveitt	—	PH&H GEC Fleet	1,916

'89 Rank	Company & Headquarters	Fleet Contact(s)	Co. Owned	Lessor(s)	#Trucks & Vans
62	Pony Express Courier Corp. Charlotte, NC	William J. Glasheen	—	TransAmerica	1,867
63	E.I. duPont de Nemours & Co. Wilmington, DE	Richard G. Prettyman	—	PH&H	1,820
64	Alabama Power Co. Birmingham, AL	Rick Owens	X	—	1,815
65	Centel Corp. Chicago, IL	Jim Edgar	X	—	1,750
66	JR Simplot Co. Mining-Soil Pocatello, ID	Terry McLaughlin	X	—	1,740
67	Flowers Industries, Inc. Thomasville, GA	Mark Worthey Troy Avera	X	—	1,700
68	Stroehmann Bakeries Horsham, PA	Paul M. Gossard	X	PH&H	1,600
69	Diebold Inc. Canton, OH	Linda Taylor	—	PH&H	1,600
70	Service Corporation Int'l. Stamford, CT	Gary L. Sanders	X	X	1,574
71	Petrolane Inc. Long Beach, CA	Steve Haverfield	X	—	1,552
72	Terminex, Int'l. Memphis, TN	Lomax Springfield	—	Wheels	1,540
73	Enron Houston, TX	Jim Davis	X	—	1,500
74	GenCorp-General Tire Akron, OH	Anthony DeJacoby	X	—	1,500
75	Florida Power Co. St. Petersburg, FL	Jim Pennington	X	—	1,500
76	Cal Gas Corp. Sacramento, CA	Jimmy Todal	X	—	1,451
77	Union Electric Co. St. Louis, MO	Walt Caesar	X	—	1,355
78	Ogden Allied Service Corp. New York, NY	R. Brandeberry	X	—	1,300

'89 Rank	Company & Headquarters	Fleet Contact(s)	Co. Owned	Lessor(s)	#Trucks & Vans
79	Whitman Corp. Chicago, IL	E.P. Walsh	—	GEC Fleet	1,300
80	Aratex Services Encino, CA	Merit Kenney	X	—	1,300
81	WR Grace & Co. New York, NY	J.W. Enterline	—	PH&H, USFL	1,290
82	Carolina Tel./Div. United Tel. Tarboro, NC	W.E. Barnes	X	—	1,224
83	Motorola, Inc. Shaumburg, IL	Charles Kuebler	X	—	1,208
84	Combustion Engineering, Inc. Windsor, CT	Donald LePard	—	McCullagh, ARI	1,200
85	Airborne Freight Corp. Seattle, WA	Martin Lanley	X	—	1,200
86	Minnesota Mining & Mfg. Co. St. Paul, MN	Tim R. Hoffmann	X	—	1,163
87	Sherwin Williams Co. Cleveland, OH	David Hall, Dan Solar	—	McCullagh	1,163
88	Arizona Public Service Phoenix, AZ	Doug McClymont	X	—	1,100
89	Air Products & Chemicals, Inc. Allentown, PA	Frank Hartzell	X	—	1,100
90	Eastman Kodak Rochester, NY	Mark Hardway	X	PH&H	1,100
91	Flagship Cleaning Services, Inc. Newton Square, PA	Rolan Brook	X	—	1,100
92	United Cable Television Denver, CO	Richard Belkie	X	—	1,100
93	McKesson Corp. San Francisco, CA	Martin J. Ward	X	X	1,075
94	Digital Equipment Maynard, MA	Rick Catino Ellen Finnerty	—	PH&H GEC Fleet	1,061

'89 Rank	Company & Headquarters	Fleet Contact(s)	Co. Owned	Lessor(s)	#Trucks & Vans
95	Greyhound Corp. Phoenix, AZ	Susan D. Richard	X	PH&H	1,055
96	Lorillard, Inc. New York, NY	Sal Giacchi	—	—	1,055
97	JI Chase Company Racine, WI	Frank Atha	X	—	1,050
98	Amtrak Philadelphia, PA	Ed Stuhl	X	—	1,040
99	Gulf States Utilities Co. Beaumont, TX	Rose Holstead	X	—	1,005
100	FMC Corp. Chicago, IL	Lawrence Dakof	X	GEC Fleet	1,000
	TOTAL				**442,970**

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AUTOMOTIVE FLEET's TOP 100

Alphabetical Cross Reference

Company Name	Rank	Company Name	Rank	Company Name	Rank	Company Name	Rank
ADT Security Systems	43	Combustion Engineering	84	Georgia Power Co.	32	R.J. Reynolds Tobacco Co.	47
Air Products & Chemicals	89	CON Edison of NY	27	Goodyear Tire & Rubber	15	Safety Kleen Corp.	49
Airborne Freight Corp.	85	ConRail	33	WR Grace & Co.	81	Sears, Roebuck and Co.	7
Alabama Power Co.	64	Consumers Power Co.	44	Greyhound Corporation	95	Service America Corp.	29
American Bakeries	52	Continental Baking Co.	9	GTE Service Corp	4	Service Corporation Int'l	70
American Elec. Power	18	Cox Enterprises, Inc.	58	Gulf States Utilities	99	Shell Oil Company	23
Amoco Corp.	36	CSX Transportation	22	Honeywell Inc.	41	Sherwin Williams Co.	87
Amtrak	98	Diebold, Inc.	69	Houston Lighting & Power	51	Siemens Corp.	37
ARA Services	13	Digital Equipment	94	Interstate Brands Corp.	14	JR Simplot Co-Mining-Soil	66
Aratex Services	80	Dow Chemical	53	Johnson Controls	48	Stroehmann Bakeries	68
Arizona Public Service	88	Duke Power Co.	38	Lorillard, Inc.	96	Tenneco, Inc.	35
Ashland Oil Inc.	30	Dupont	63	Marathon Oil Co.	54	Terminex, Int'l	72
Atchinson Topeka Santa Fe	46	Eastman Kodak	90	McKesson Corp.	93	Texaco, Inc.	25
Borden Dairy Group	26	Emery & Purolator	12	Minnesota Mining & Mfg.	86	Texaco, Inc. (Central)	56
Borg Warner	55	Enron	73	Montgomery Ward	61	Tupperware	10
Brown & Williamson	60	Entenmann Bakery, Inc.	50	Motorola, Inc.	83	U-haul	2
Burlington Northern RR	42	Exxon Company U.S.A.	34	Norfolk Southern	45	Union Electric Co.	17
Cal Gas Corporation	76	Federal Express	5	Ogden Allied Serv. Corp.	78	Union Pacific Railroad	21
Campbell Sales Co.	16	Flagship Cleaning Services	91	Penske	3	United Cable Television	92
Canteen Corp	40	Florida Power Co.	75	Petrolane Inc.	71	United Parcel Service	1
Carolina Tel/Div United Tel.	82	Flowers Industries	67	Phillip Morris U.S.A.	20	USX Corporation	57
Centel Corp.	65	FMC Corp.	100	Philips Petroleum	39	VPSI	28
JI Chase Company	97	Frito Lay, Inc.	8	Pony Express Courier	62	Westinghouse Elec. Corp.	31
Chesapeake & Potomac	11	GenCorp-General Tire	74	Quality Bakers America	6	Whitman Corp.	79
Columbia Gas Distribution	59	General Electric	24	Rollins Inc.	19	Xerox Corporation	17

Many fleet managers treat light-duty trucks in the same manner as they do cars. This practice is expensive and causes problems. When it comes to specing trucks, the expertise and advice of a third party expert are helpful.

Decision Path For Specing Light Trucks

The idea of specing out a truck — even a light-duty truck — strikes fear into the hearts of many fleet administrators. Quite frankly, many are intimidated by the arcane jargon (GAWR, payload, cab-axle ratios) and the mix-and-match maze of equipment compatibilities that goes with trucks. By contrast, automobiles seem straightforward, and fleet managers feel much more comfortable figuring out which options increase resale than worrying about load distribution.

Light-duty trucks are sandwiched between cars and "heavies." There's a tendency to treat trucks as cars (especially vans, pickups, and sport utilities) and ignore the differences that make them trucks. Meanwhile, if trucks don't fit automotive ordering habits, some fleet managers tend to either delegate light truck ordering to the dealer who ordered their last trucks, or to a manufacturing rep, or a fleet management company specialist.

The trouble is treating light trucks like cars or delegating the job completely to a third party can be expensive solutions to the problem. And, the volume of trucks being purchased for fleets today (about 50 percent of automobile purchases) simply multiplies the risks. Over-speced or under-speced vehicles may fail to do the job, are very expensive to operate, and prove virtually impossible to dispose. Purchasing the right new vehicles for a fleet is like an equation. One aspect of this equation is technical expertise. But knowledge of the application context — that is, a detailed familiarity with the daily operations of a fleet's vehicles, its drivers, and the company's business plans for the next few years — is also an essential part of the equation.

No matter how qualified an outside third party may be, chances are that their knowledge of the application context is superficial. That's what the fleet administrator must bring to the table.

The fact is that specing out a truck will probably continue to include a third party expert: there's no way the average fleet administrator can match the expert's years of first-hand experience and technical know-how. So, acquiring enough truck expertise to replace the specialist is not the issue. Rather, there should be a dialogue — a working relationship — with the specialist who is being used to properly spec out new trucks. This requires striking a fine balance be-

Truck Classes Weight	Class	GVW	Types
Light-Duty	1	≤ 6,000 lbs	
	2	6,001-10,000	
	3	10,001-14,000	
Medium-Duty	4	14,001-16,000	
	5	16,001-19,500	
Heavy-Duty	6	19,501-26,000	
	7	26,001-33,000	
	8	≥ 33,001	

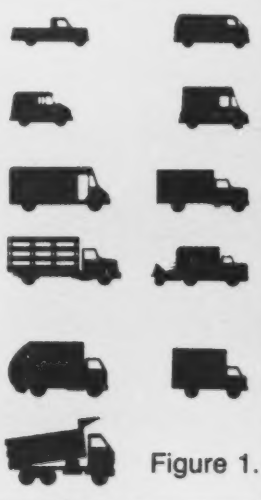


Figure 1.

tween performance and operating economy.

In order to have a fruitful dialogue, the fleet administrator needs to know the issues on which the specification process turns: namely, where critical decisions are made regarding choices of options and equipment, and the kinds of data (drawn from the application context) necessary to make intelligent decisions.

To illustrate this process. it's possible to sketch a simple "decision path" that traces the process, showing where the most significant decision points are, and the implications of each choice for further specifications choices. (The computer-aided ordering systems that most dealers, manufacturers, and management companies use today are often simply sophisticated decision trees.) By offering an elementary model here, the intention is to show how to prepare for the process, and show why a grasp of "operating context" is essential.

Henry Ford once said that no task is too difficult if it is broken up into its component parts. Following that advice, a good starting point is to recall the fundamental fact that trucks are designed to enable *people* to move *cargo* for some *repeated purpose*. These notions — people, cargo, and duty cycle — provide a useful framework around which to organize the issues that decide vehicle type, payload capacity, drivetrain, options, and other features.

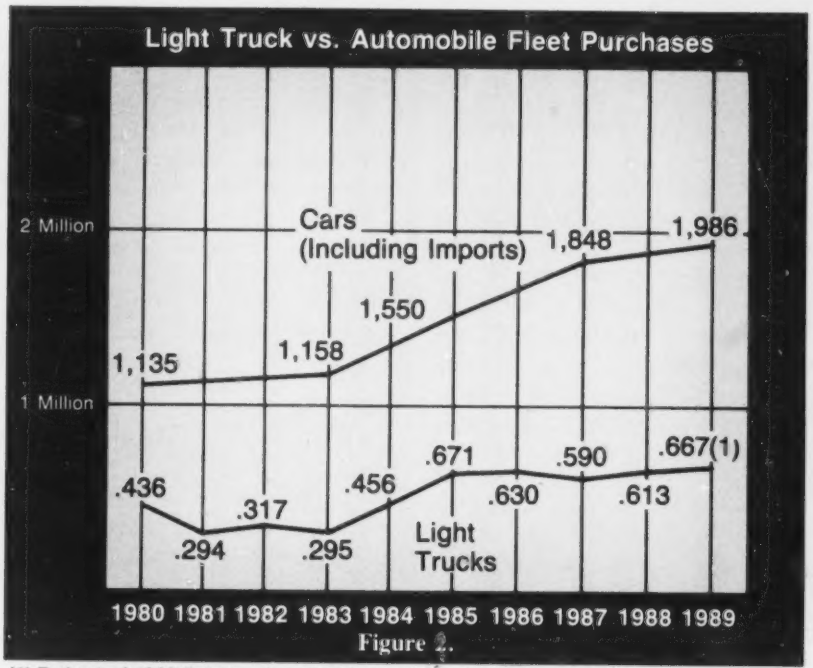


Figure 2.

(1) Estimated 1989 light truck registrations. In the first six months of 1989, there were 333,661 light-truck fleet registrations.

People

If the primary purpose of the vehicle is to transport people, then determining the number of occupants regularly carried may well decide what type of truck is needed: minivan, full-size van, and so forth. However, factoring in other features of regular usage (off-road, executive passengers, and baggage load) may lead to a different type vehicle altogether such as sport utility.

Cargo

The "chicken and the egg" syndrome occurs when "cargo" is not peope but goods and materials. The decision on whether to focus on the chassis or the body is one of the initial stumbling blocks. These factors mutually determine one another. Staying with the basic "decision path," however, it's useful to look at the cargo and see what it suggests about the body of the truck.

Most novices assume that the most important aspect of truck specification is the gross vehicle weight (GVW). But, GVW is actually the result of having first determined other features such as cargo rating, which is the ratio of the weight to the volume of cargo needed for properly sizing the payload. However, it's necessary to make sure that the full load intended for the truck does not exceed its maximum weight capacity, while making economical use of the load space.

Load density calculations relate to payload, which is simply the total combined weight of the cargo and occupants. To determine the right payload entails a non-scientific judgment call: how much over-capacity to build into the payload capacity of the truck. Specing the truck to the minimum necessary (based on average load, or looking only at today's business needs) means the truck will be operating at peak capacity most of the time. Using average payload for final specs means the truck will sometimes be overloaded — and that means breakdowns, excessive wear and tear, high maintenance costs, and poor operating economy. At the same time, too much payload capacity — capacity that is consistently unused — is an obvious waste to be avoided.

A truck expert may suggest a specific guideline, for instance, 15 percent, but your knowledge of company operations — varying workloads, new product introductions, business expansion plans, and driver preference —should provide the context for deciding how much payload to specify.

Payload plus curb weight (including optional equipment) define the gross vehicle weight — the maximum weight of a fully-loaded truck.

GVW must not ever be exceeded, so here again a reasonable overcapacity should be planned into the specs.

As important as GVW is, it alone does not tell us what class or size of truck is needed. How the cargo load is distributed is extremely important and it is determined by the gross axle weight rating (GAWR). GAWR is like the strength of a chain identifying the maximum load bearing limit of a complete axle and suspension system, made up of wheels, tires, springs but not shocks. And like a chain, the overall rating is limited by the capacity of the weakest link (usually the tires). Since GAWR is equal to the lowest rating of any of these components, one "link" cannot simply be upgraded to insure a higher GAW rating.

As in the case of the GVW rating, the gross axle weight rating cannot be exceeded without risking steering and handling problems, excess wear, and reduced vehicle life. This is another judgment call. To be safe, the vehicle's GAWR should be set higher than normal usage requires. The price for safety and reliable performance will, of course, be some loss of operating economy. However, enhanced resale value may entirely justify the expense.

At this point, the *body* requirements and class of truck have been largely identified. Now it's time to think about powertrains. In addition to engine and transmission, however, it's also necessary to look at final drive ratio requirements. These are simply the number of turns the drive shaft makes compared to the turns of the axle shaft. (A 4.10:1 ratio means the drive shaft turns 4.10 times for every turn of the rear axle.) Higher ratios usually mean high performance, and heavy loads can be moved more easily. (This is important even with vans and pickups where towing might be a consideration.)

Higher ratios make sense, for example, for fully-loaded trucks operating in congested, urban conditions. In these situations performance may be more important than operating economy — something the fleet administrator must decide.

Final drive ratio must be matched with the right transmission to yield expected performance. A high ratio, suited for city applications, could be wasted when teamed with an overdrive transmission. Heavy loads suggest the need for manual transmissions, where lower first gear ratios allow for better start-offs. If the vehicle is used off-road, a four- or five-speed manual provides better control and maneuverability.

Powertrain options cannot be decided without reference to the third critical point in the decision path: duty cycle. A review of the truck's normal operating environment will help to settle most of the remaining specification questions. How is the truck to be loaded and unloaded? Is loading manual or automated? Are forklifts used? Is loading from the ground or from a dock? The answers will indicate whether a walk-in truck or a straight truck (cab truck with van body and dock height loading floor) is appropriate.

How is the cargo distributed? Do drivers frequently stop on a regular delivery circuit? (Walk-ins are a lot easier on the driver.) If there's a stop-and-go pattern, go back and look at engine specification. Was a diesel considered? (Diesels excel in this kind of environment.) If distribution is in congested urban areas, then a short wheelbase (with its reduced turning radius), and a tall, narrow body make good sense. For inter-urban deliveries, where most of the travel takes place on highways, a longer wheelbase and lower, wider body performs better. One question to ask is whether this will affect payload and body size decisions?

Distribution patterns and operating environment also tell whether the truck should be fitted with a liftgate (for dock-to-dock loading/unloading), or a ramp. Also, the type and placement of doors will be indicated by normal operating patterns. For example, street-side side doors probably shouldn't be put on walk-ins used for city deliveries.

This detailed review of actual and planned operating conditions allows for a more complete anticipation of the additional equipment the truck will need. It's always easier and less expensive to build these items into the truck, rather than adding them later (if they can be added at all). Think about what the use of the forklifts entail: extra underframing, a hardwood floor, protective plates inside the body, and added support over the wheels. Other potential re-

Vocabulary

Payload = Occupant Weight + Cargo Weight

Gross Vehicle Weight = Curb Weight + Payload

Gross Axle Weight = Lowest Rating Within Axle/Suspension Componentry

Load Density = Cargo Weight: Cargo Volume

Figure 3.

quirements, such as refrigeration, supplemental lighting, racks, shelves, bulkheads, and the like, should be planned for now rather than later. Keep in mind, also, that the average service life of a truck is about five years. It's important to try to anticipate any significant changes in the way your company does business that are likely to occur during that time frame.

Throughout the specification process, a concern for the comfort and safety of the driver/occupants should make itself known. The manufacturer or body builder (who installs the body on the chassis) is finally responsible for certifying that the appropriate Federal Motor Vehicle Safety Standards have been met. But you should look beyond the minimal, mandatory safety requirements to see that other factors such as the most effective restraint systems, non-flammable materials, lighting, steps, and grab handles have been provided.

Looking at the specification process as a whole, it begins to appear more as a circle than a tree, since decisions in one area (engine type, for example) are impacted directly by decisions in another area such as body type. They mutually determine one another. And throughout the process, "judgment calls" must be made that strike a balance between performance and operating economy. These decisions are determined by the fleet administrator's knowledge of the company, its priorities, and its plans.

The effect of optional equipment on the resale value of trucks is a tricky issue. The more a truck's application resembles that of a car, the easier it is to believe that "what's good for cars is good for trucks." However, as the truck takes on a more utilitarian purpose, the wisdom of the rule becomes more doubtful. Do power windows help sell a stepvan? Does the market expect air conditioning on a cab and chassis?

Other options are almost always good values for trucks such as bedliners on pickups (for cosmetics and corrosion protection) and on-the-fly four-wheel drive for off-road vehicles. However, the value of specific options is something to include in your dialogue with a truck specialist. Decisions will be made — once again — by referring to the operating conditions of a truck. These include geographic area, local resale market, driver expectations, and the operating environment.

Truck engineering is not a simple task, nor is it a natural talent. It's a function that relies on two types of input: technical and proprietary.

Before ordering a truck — either for first time use or as a replacement — it may still be necessary to work with an expert who provides the technical talent the job requires. That person may be found at a dealership, a fleet management company, a body building company, or a manufacturer. Their computer-aided specification capabilities can simplify the selection of compatible options, and help fit the truck to its intended application.

What should be avoided is simply ordering duplicates of the trucks being replaced, or delegating the task completely to a third party. Fleet managers should know enough about the specification process to know where their "propriety knowledge" of the company's operations, personnel, and plans are relevant to the key decisions to be made. The fleet manager provides knowledge of the application context in which choices are made intelligently. This makes the specification process a dialogue — a shared activity where choices are not simply the result of the expert's assumption about a fleet.

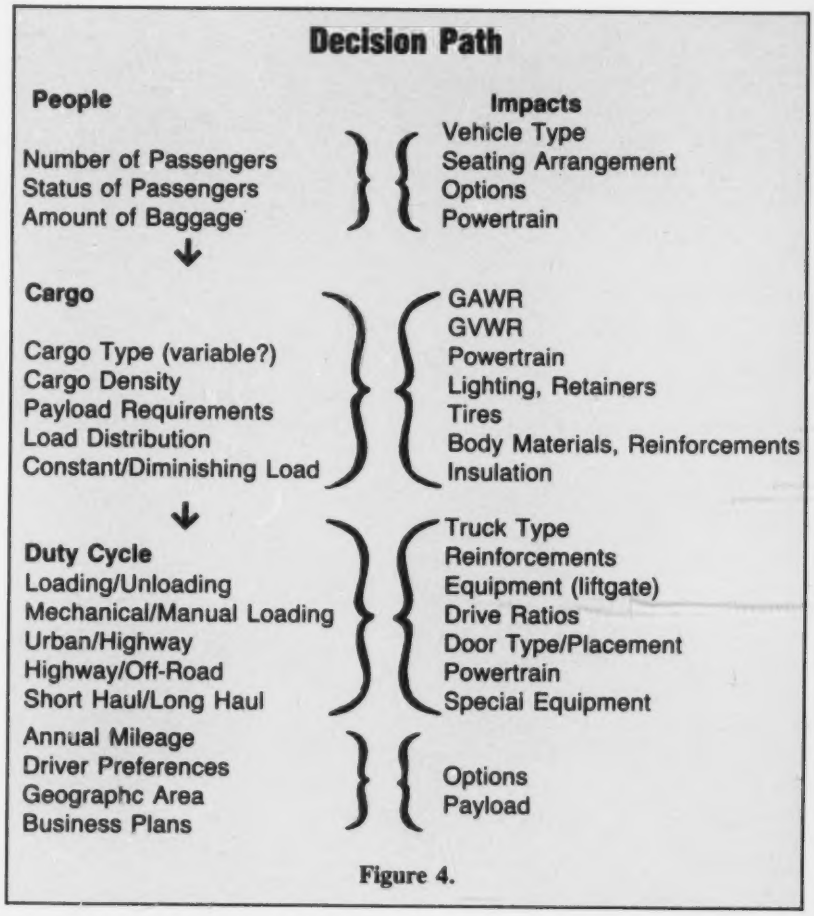
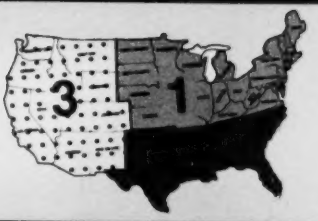


Figure 4.

USED CARS

The following are average used-car prices for the period ending November 1, 1989. Prices are based on wholesale activity at major dealers across the country. They are divided into three zones as indicated on the accompanying map. These averages are calculated electronically in IBM machines. They are based on clean cars only. Proper allowance should be made for upgrading sharp cars and proper deduction taken for fair cars. Automatic transmissions have been included in the averages of all models. This information is published in *Automotive Fleet* by special permission of Automotive Market Report.



88 BUICK SKYHAWK			
Coupe	6,062	6,123	5,941
Sedan	6,148	6,209	6,026
87 BUICK SKYHAWK			
Cust Coupe	4,939	4,989	4,840
Cust Sedan	5,015	5,065	4,914
88 BUICK SKYLARK			
Cust Sedan	7,486	7,562	7,337
87 BUICK SKYLARK			
Cust Sedan	6,238	6,300	6,113
88 BUICK CENTURY			
Cust Sedan	7,456	7,531	7,307
87 BUICK CENTURY			
Cust Sedan	6,247	6,309	6,122
88 BUICK LESABRE			
Cust Sedan	9,472	9,566	9,283
87 BUICK LESABRE			
Cust Sedan	7,639	7,716	7,486
88 CADILLAC DE VILLE			
Coupe	14,762	14,909	14,467
Sedan	14,936	15,086	14,637
87 CADILLAC DE VILLE			
Coupe	12,151	12,274	11,909
Sedan	12,300	12,424	12,054
88 CADILLAC SEVILLE			
Sedan	16,107	16,269	15,786
87 CADILLAC SEVILLE			
Sedan	13,613	13,749	13,341
88 CHEVY BERETTA			
Coupe	7,099	7,169	6,957
88 CHEVY CORSICA			
Sedan	6,647	6,715	6,515
87 CHEVY BERETTA			
Coupe	5,656	5,712	5,543
87 CHEVY CORSICA			
Sedan	5,226	5,279	5,122
88 CHEVY CAVALIER			
Sedan	5,890	5,950	5,773
87 CHEVY CAVALIER			
Sedan	4,559	4,604	4,468
88 CHEVY CELEBRITY			
Sedan	7,031	7,102	6,890
87 CHEVY CELEBRITY			
Sedan	5,597	5,654	5,486
88 CHEVY CAPRICE			
Sedan	7,984	8,064	7,824
87 CHEVY CAPRICE			
Sedan	6,559	6,623	6,427
88 CHRYSLER NEW YORKER			
Sedan	11,109	11,220	10,886
87 CHRYSLER NEW YORKER			
Sedan	7,934	8,013	7,775
88 CHRYSLER FIFTH AVENUE			
Sedan	10,743	10,851	10,530
87 CHRYSLER FIFTH AVENUE			
Sedan	8,525	8,609	8,354
88 DODGE ARIES AMERICA			
Sedan	5,451	5,505	5,342
87 DODGE ARIES			
Sedan	4,405	4,448	4,316
88 DODGE SHADOW			
Liftbk 5 Dr	5,791	5,850	5,677
87 DODGE SHADOW			
Liftbk 4 Dr	4,814	4,862	4,717
88 DODGE DYNASTY			
Sedan	8,784	8,872	8,609
88 FORD ESCORT			
Htchbk 4 Dr GL	4,914	4,964	4,816
87 FORD ESCORT			
Htchbk 4 Dr GL	3,924	3,964	3,846
88 FORD MUSTANG			
LX-4 Coupe	6,655	6,722	6,522
87 FORD MUSTANG			
LX-4 Coupe	5,409	5,464	5,301
88 FORD TEMPO			
GL Sedan 4 Dr	5,885	5,945	5,767
87 FORD TEMPO			
GL Sedan 4 Dr	4,705	4,753	4,611
88 FORD TAURUS			
GL Sedan 4 Dr	7,927	8,006	7,769
87 FORD TAURUS			
GL Sedan 4 Dr	6,529	6,594	6,399
88 FORD CROWN VICTORIA			
Sedan	10,175	10,277	9,972
87 FORD CROWN VICTORIA			
Sedan	8,462	8,547	8,293
88 FORD THUNDERBIRD			
Coupe	8,979	9,069	8,799
87 FORD THUNDERBIRD			
Coupe	7,527	7,601	7,376
88 LINCOLN			
Town Car Sedan	15,003	15,152	14,702
Mark VII Coupe	16,698	16,864	16,363
Continental Sedan	18,544	18,729	18,173
87 LINCOLN			
Town Car Sedan	12,617	12,742	12,364
Mark VII Coupe	13,516	13,652	13,246
Continental Sedan	13,722	13,860	13,448
86 MAZDA 626			
LX Sedan 4 Dr	8,709	8,795	8,534
88 MERCURY COUGAR			
LS Coupe	9,398	9,492	9,210
87 MERCURY COUGAR			
LS Coupe	7,905	7,983	7,747
88 MERCURY TOPAZ			
GS Sedan 4 Dr	6,011	6,070	5,890
87 MERCURY TOPAZ			
GS Sedan 4 Dr	4,739	4,787	4,644
88 MERCURY SABLE			
GS Sedan	8,049	8,129	7,887
87 MERCURY SABLE			
GS Sedan	6,555	6,620	6,424
88 MERCURY GRAND MARQUIS			
Sedan	10,710	10,817	10,496
87 MERCURY GRAND MARQUIS			
Sedan	9,065	9,155	8,883
88 NISSAN SENTRA			
Sedan 2 Dr	4,703	4,750	4,609
88 NISSAN STANZA			
E Ntch 4 Dr	7,595	7,671	7,443
88 NISSAN MAXIMA			
SE Sedan	11,707	11,826	11,473
87 NISSAN SENTRA			
Sedan 2 Dr	3,848	3,886	3,769
87 NISSAN STANZA			
E Ntch 4 Dr	6,041	6,101	5,919
87 NISSAN MAXIMA			
SE Sedan	9,050	9,140	8,869
86 OLDS CIERA			
Coupe	7,376	7,449	7,228
Sedan	7,456	7,531	7,307
87 OLDS CIERA			
S Coupe	6,230	6,292	6,106
Sedan	6,302	6,366	6,177
88 OLDS CALAIS			
Sedan	7,403	7,476	7,254
87 OLDS CALAIS			
Sedan	6,245	6,307	6,120
88 OLDS CUTLASS SUPREME			
Coupe	8,609	8,696	8,437
87 OLDS CUTLASS SUPREME			
Coupe	7,231	7,304	7,087
Sedan	7,231	7,304	7,087
88 OLDS 98 REGENCY			
Sedan	11,107	11,218	10,885
87 OLDS 98 REGENCY			
Sedan	9,217	9,309	9,032
88 PLYMOUTH RELIANT			
Sedan	5,451	5,505	5,342
87 PLYMOUTH RELIANT			
Sedan	4,418	4,462	4,330
88 PLYMOUTH SUNDANCE			
Liftbk 4 Dr	5,787	5,845	5,672
87 PLYMOUTH SUNDANCE			
Liftbk 4 Dr	4,783	4,830	4,687
88 PLYMOUTH GRAN FURY			
Salon Sedan	6,159	6,221	6,036
87 PLYMOUTH GRAN FURY			
Salon Sedan	4,944	4,994	4,845
88 PONTIAC SUNBIRD			
SE Coupe	6,129	6,191	6,007
Sedan	6,212	6,273	6,087
87 PONTIAC SUNBIRD			
SE Coupe	4,808	4,856	4,712
Sedan	4,735	4,782	4,640
88 PONTIAC 6000			
Coupe	7,126	7,197	6,983
Sedan	7,204	7,276	7,060
87 PONTIAC 6000			
Coupe	5,737	5,794	5,622
Sedan	5,803	5,861	5,688
88 PONTIAC GRAND AM			
Sedan	7,246	7,318	7,100
87 PONTIAC GRAND AM			
Sedan	6,418	6,482	6,290
88 PONTIAC BONNEVILLE			
Sedan	9,373	9,467	9,186
87 PONTIAC BONNEVILLE			
Sedan	7,960	8,039	7,801
88 PONTIAC GRAND PRIX			
Coupe	8,783	8,871	8,608
87 PONTIAC GRAND PRIX			
Coupe	7,277	7,350	7,131
88 TOYOTA COROLLA			
Sedan 4 Dr Deluxe	6,745	6,814	6,612
88 TOYOTA CAMRY			
Sedan 4 Dr Deluxe	9,161	9,254	8,979
88 TOYOTA CRESSIDA			
Lux Sedan	13,743	13,881	13,469
87 TOYOTA COROLLA			
Sedan 4 Dr Deluxe	5,387	5,439	5,277
87 TOYOTA CAMRY			
Sedan 4 Dr Deluxe	7,810	7,889	7,657
87 TOYOTA CRESSIDA			
Lux Sedan	11,362	11,472	11,133
88 VOLKSWAGEN JETTA			
Sedan 4 Dr	7,250	7,322	7,106
87 VOLKSWAGEN JETTA			
Sedan 4 Dr	5,971	6,030	5,851

CALENDAR

DECEMBER

Nov. 30-Dec. 3—Avis Licensee Meeting, Fairmont Hotel, San Francisco, CA. Information: (516) 222-3000.

5-6—National Vehicle Leasing Association, The Foundations of Leasing Seminar, Adams Mark Hotel, Indianapolis, IN. Information: (213) 838-3170

5-7—Maintenance Management Seminar, Michigan State University, East Lansing, MI. Information: (517) 353-1790.

JANUARY

6-14—North American International Auto Show, Cobo Hall, Detroit, MI. Information: (313) 872-4311.

6-14—Los Angeles Auto Show, Los Angeles Convention Center, Los Angeles, CA. Information: (213) 748-8531.

16-17—National Vehicle Leasing Association, The Foundations of Leasing Seminar, Holiday Inn Raritan Center, Edison, NJ. Information: (213) 838-3170.

FEBRUARY

10-13—National Automobile Dealers Association Annual Convention, Convention Center, Las Vegas, NV. Information: (703) 821-7000.

21-24—American Automotive Leasing Association Convention, Doral Country Club, Miami, FL. Information: (202) 223-2600.

25-Mar. 1—American Car Rental Association, 12th Annual Convention, Arizona Biltmore, Phoenix, AZ. Information: (202) 223-2118.

MARCH

4-7—Limousine & Chauffeur Show, Las Vegas Hilton, Las Vegas, NV. Information: (213) 376-8788.

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GAS PRICES

DECEMBER 1989

City	Cost Per Gallon Unleaded Full-Serve	Self-Serve
Juneau, AK	165.9[c]	150.2[c]
Selma, AL	112.0	102.1
Pasadena, CA	136.9	85.6
Glenwood Springs, CO	149.5	131.9
Washington, DC	143.9	110.6
Jacksonville, FL	143.9	92.5
Maui, HI	183.9	144.6
Indianapolis, IN	137.6	96.9
Kansas City, MO	128.0	94.7
Uniontown, PA	116.0	87.9
Charleston, SC	122.9	95.9
Nashville, TN	136.6	98.9
San Antonio, TX	127.9	90.9
Milwaukee, WI	130.3	97.7
Casper, WY	132.9	110.4

Survey conducted during the first five working days of November 1989.
Supplied by Runzheimer International, Runzheimer Park, Rochester, WI.